


## PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 3281B-01-WO	<b>FOR FURTHER ACTION</b>		See Form PCT/PEA/416
International application No. PCT/US2005/004198	International filing date (day/month/year) 09.02.2005	Priority date (day/month/year) 19.02.2004	
International Patent Classification (IPC) or national classification and IPC INV. C08F20/00 C09J4/00 C08F220/58			
Applicant THE LUBRIZOL CORPORATION et al.			
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 4 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> sent to the applicant and to the International Bureau) a total of sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>			
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the report</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>			
Date of submission of the demand  29.09.2005		Date of completion of this report  16.05.2006	
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized officer  Trauner, H-G  Telephone No. +49 89 2399-7533	



**INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY**

International application No.  
PCT/US2005/004198

**Box No. I Basis of the report**

1. With regard to the **language**, this report is based on \_\_\_\_\_
- ☒ the international application in the language in which it was filed
  - ☐ a translation of the international application into \_\_\_\_\_, which is the language of a translation furnished for the purposes of:
    - ☐ international search (under Rules 12.3(a) and 23.1(b))
    - ☐ publication of the international application (under Rule 12.4(a))
    - ☐ international preliminary examination (under Rules 55.2(a) and/or 55.3(a))
2. With regard to the **elements**\* of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):*

**Description, Pages**

1-16 as originally filed

**Claims, Numbers**

1-25 as originally filed

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

\* If item 4 applies, some or all of these sheets may be marked "superseded."

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International application No.  
PCT/US2005/004198

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**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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1. Statement

Novelty (N)	Yes: Claims	15-25
	No: Claims	1-14
Inventive step (IS)	Yes: Claims	15-25
	No: Claims	1-14
Industrial applicability (IA)	Yes: Claims	1-25
	No: Claims	

2. Citations and explanations (Rule 70.7):

**see separate sheet**

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Ad V

The subject-matter of the present application is not novel and inventive in the sense of Art 33(1)-(3) PCT.

The subject-matter of the present application relates to a process wherein a certain amount of a lipophilic amine salt of an ethylenically unsaturated water soluble polymerisable sulfonic acid monomer is polymerised in water in the presence of a water insoluble lipophilic monomer other than the lipophilic amine salt (claims 1 and 20), products according to claims 15 16 and 20 containing the outcoming polymers. It is acknowledged that according to the arguments provided in the reply letter the gist of the invention lies in the use of a lipophilic amine salt of an ethylenically unsaturated water soluble polymerisable sulfonic acid monomer. In particular lower organic amine cations, such as methyl amine, ethyl amine, etc. (first page, second paragraph of the reply letter) are not suitable to provide lipophilic faculties. As outlined in the application the lipophilic character is provided when the total carbon atoms in the amine ion have at least 6 (page 5, lines 25-26). Using ethyl amine, which is considered a lower organic amine, the total number of carbon atoms is at least 6 ( $3 \times 2$ ). Thus, the corresponding amine salt is also lipophilic in the sense of present claim 1. Thus, the subject-matter of present claim 1 is anticipated by D1.